

REVIEW

A Natural History of Ferns, by Robbin C. Moran. 2004. Timber Press, Portland, Oregon. 301 pp. Hardcover [ISBN 0-88192-667-1]. \$29.95.

Every field needs a book that conveys the endearing qualities and quirks of its subject matter to non-professionals while simultaneously reminding the experts of their good fortune for such work. Robbin Moran provides pteridology with such a book in “A Natural History of Ferns.” With an accessible popular writing style, Moran engages readers with a diverse account of ferns and their historical allies. Included in the 301 page book are numerous black and white figures, a set of 26 color plates, an index, and a glossary for those not familiar with the lexicon of pteridology.

The book is composed of 33 essays organized into six sections. The first two sections cover general fern biology and classification. These sections are comprehensive and well integrated, and should provide readers not intimately familiar with these subjects a solid introduction to the field. In these sections, I was particularly impressed with Moran’s exposition of fern reproductive systems. Also, he sagely includes some details on the investigative and formal processes behind the science. For example, he explains how hybrids are identified using both morphological and molecular data. The nomenclatural process receives great coverage as well. Such accounts should add vitality to taxonomic keys for novices and elucidate the processes behind key construction. Although Moran covers a large quantity of basic information in the first 100 pages, the writing remains conversational and avoids a textbook style. Thus, people should learn a great deal without realizing it.

Subsequent sections and essays review fern fossils, interesting adaptations, biogeography, and tales of ferns and people. Moran cogently covers fern fossil history that properly places ferns in a historical context. The sections on interesting adaptations of ferns provide a look at some of the fern oddities, such as *Solanopteris* and iridescent pteridophytes. Fern biogeography is well covered, with stories about islands, the tropics, and the Asian–American relationships of many plants. Moran’s sections on ferns and people include a relationship gone awry with *Salvinia molesta*, and a rather unbelievable tale in “The Vegetable Lamb of Tartary.” Readers may recognize some of these essays from Moran’s contributions to the Fiddlehead Forum, and like those contributions these essays generally stand alone and may be read separately or in order.

A variety of readers will find this book interesting and useful. Novices of natural history will certainly enjoy Moran’s intriguing accounts of ferns and people. The stand alone nature of many essays makes them potential supplemental readings for high school or undergraduate courses. This is especially true as the essays are not limited to just ferns but elucidate general biological patterns and processes. For example, the essays on island biogeography and

tropical diversity provide insight into the biology of these areas in general. Students should find these essays relatively easy to read, as Moran provides an outstanding amount of information without being laborious, a quality that should be found in more of our educational writing.

The largest accomplishment of this book is the way Moran brings to life the science and process of gathering our fern knowledge. For example, his description of taxonomy paints it as a dynamic field that is constantly changing to accommodate new data. And his tales of the personalities of pteridology and taxonomy put a human face behind the names in keys and provide a glimpse of a world that few people outside of academia ever see. In many respects, Moran's writings in "A Natural History of Ferns" are reminiscent of Stephan Jay Gould's popular essays that effortlessly weave an interesting tale suffused with a depth of knowledge. For this reason, Moran's book is an asset to pteridology that will hopefully attract new people to the field and invigorate those who have already found it.—MICHAEL S. BARKER, Department of Biology, Indiana University, Bloomington, IN 47405.